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FACILITATING EXPRESSION WITHOUT WORDS: AN INTERVENTION-BASED APPROACH FOR LEARNERS WITH INTELLECTUAL DISABILITIES

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ABSTRACT
The current research aimed to explore the assessment of the effectiveness of structured communication interventions for facilitating nonverbal communication among children with Intellectual Disabilities (ID). Touch: An aspect of nonverbal communication including eye contact, gestures, facial expression and body language play a critical social, emotional, and cognitive implications for people with ID. Quantitative research design was used with a pre and post intervention research design using a quasi-experimental design with a target population of 6 learners with moderate intellectual disability aged 9-12 years. The study involves two groups; experimental group and control group. The experimental group was taught in nonverbal communication skills that were related to the research study, while the control group followed the normal teaching regime. Instruments used for data collection: pre and post-tests, observation checklists and interviews with educators and parent- interview. In terms of the results, the analysis revealed that the subjects in the experimental group made very small gains in terms of nonverbal communication skills including: their ability to maintain eye contact; to produce meaningful gestures within a given context; and to co-ordinate the appropriate facial expressions and bodily movements. Conclusions highlighted integrated, medium-long term approaches to learner-specific interventions for children with ID and drawn attention to the role of educators, speech pathologists and caregivers in strategizing for effective communication. Based on the findings, the study establishes the effectiveness of intervention on the development of nonverbal communication and highlights directions for future research as well as focus on intervention improvement.

KeyWords:Nonverbal Communication, Intellectual Disabilities, Communication Interventions, Special Education, Behavioral Interventions.

INTRODUCTION

Communication is essential for expressing thoughts, emotions, and opinions, especially during childhood development, as it underpins cognitive, emotional, and social integration. Children with Intellectual Disabilities (ID) often struggle with communication, particularly verbal, making nonverbal communication, eye contact, gestures, facial expressions, and body language, crucial (Vygotsky, 1983; Al-Yagon, 2016). Vygotsky emphasized communication's role in cognitive development through social interaction with more capable peers, suggesting interventions can enhance emotional and cognitive outcomes for children with ID.

Due to sensory and cognitive impairments, many children with ID rely heavily on nonverbal means to communicate. These include facial expressions, gestures, and symbol use, which help convey needs and emotions in daily life. Interest in improving nonverbal skills has grown, as these children face frustration and isolation when unable to interact effectively. Structured nonverbal strategies can reduce these challenges and foster inclusion.

ISSN E: 2709-8273
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JOURNAL OF APPLIED LINGUISTICS AND TESOL

Interventions like Picture Exchange Communication System (PECS) and speech-generating devices support children unable to speak (Lancioni et al., 2007; Mirenda, 2003). These augmentative and alternative communication (AAC) methods improve social interaction, reduce frustration, and enhance academic and emotional engagement (Zaidman-Zait et al., 2020; Fenning et al., 2014).

Educators play a vital role in developing nonverbal skills using tools like communication boards, picture cards, and visual schedules (Glatt, 2024). Techniques such as modeling, role-playing, and positive reinforcement, when combined with support from speech-language pathologists and occupational therapists, can further enhance outcomes (Archana & Bajpai, 2024). Gestures also aid emotional understanding and social bonding (Zashchirinskaia, 2020).

Improving gesture use reduces behavioral issues such as aggression or withdrawal linked to communication frustration. Hence, caregivers and educators must implement interventions tailored to children with ID to improve their ability to interact meaningfully.

LITERATURE REVIEW

Communication interventions are vital for improving nonverbal communication in students with Intellectual Disabilities (ID). Shree and Shukla (2016) emphasized that ID affects cognitive activities like perception and reasoning, necessitating educational support. Vakil, Shelef-Reshef, and Levy-Shiff (1997) asserted that children with ID benefit from proper interventions, though they still lag behind peers. Wehman (1997) and Hourcade (2002) highlighted the need for individualized strategies to address impairments in intellectual development.

Beirne-Smith, Patton, & Kim (2006) noted memory limitations in individuals with ID, which can be improved through structured training (Fletcher, Huffman, & Bray, 2003). Kittler et al. (2004) and Saunders (2001) reported poor stimulus control and difficulty focusing on relevant information, supporting the need for communication-based interventions. Hunt and Marshall (2002) also emphasized the importance of attention-filtering strategies for effective learning.

Hardman et al. (2008) associated impulsivity and poor responsiveness with poor adaptive behavior, calling for targeted interventions. Lee et al. (2003) found that children with mild ID struggle to form friendships, pointing to the need for enhancing social skills. Shonkoff and Phillips (2000) and Sternberg (2003) linked poor self-regulation and metacognition to learning barriers in ID, suggesting cognitive training as a remedy.

Beirne-Smith et al. (2002) discussed how learned helplessness reduces motivation, reinforcing the need for supportive environments. Browder et al. (2006) and Hallahan & Kauffman (2006) argued that academic learning should not be denied even to children with severe ID and that comorbid conditions must be addressed. Drew and Hardman (2007) highlighted the presence of multiple disabilities in such children, while Westling and Fox (2004) advocated for an integrated developmental approach.

Vygotsky emphasized communication's role in psychological and social development. Bradley (2013) and Solodiuk (2013) promoted structured communication to improve self-expression. Zaidman-Zait et al. (2020) and Fenning et al. (2014) found that enhancing nonverbal skills supports social behaviors and integration.

Nienke, Strasser & Kulkarni (2017), and Fink et al. (2015) showed that gesture-based strategies and sign language help nonverbal children with ID communicate. Barton-Hulsey et al. (2017) and Cohen & Houtrow also emphasized nonverbal channels like gestures and picture boards for peer interaction. Courbin (1980) validated body language as effective for social interaction.

ISSN E: 2709-8273
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JOURNAL OF APPLIED LINGUISTICS AND TESOL

Floyd and Olson (2017) stressed tailoring interventions to specific gesture needs. Al-Yagon (2016) highlighted the importance of gestural development for social and psychological growth. These studies affirm that structured interventions are essential in fostering nonverbal communication, improving social inclusion and emotional well-being.

Statement of the Problem

The purpose of this research was to examine the effectiveness of communication interventions for enhancing the nonverbal communication skills of learners with ID. For many children with ID, verbal communication is impractical; however, nonverbal communication can be used to convey ideas, feelings, and needs. Alternative Communication systems are effective for enhancing communication skills in children with ID and overall, the effects of the communication intervention have not been fully investigated, about the educators' perceptions of the changes in their students. Consequently, this research aimed to establish how communication interventions affect non-verbal communication in children with ID and establish the perception of educators on the communication interventions.

Objectives of the Study

The objectives of this study are as follows:

1. To enhance social interaction and non-verbal communication.
2. To develop non-verbal communication shall among learners.
3. To assess the effectiveness of structured communication intervention.
4. To evaluate the role of educators in implementing communication interventions.

Research Questions

The following research questions guide the study:

1. How can social interaction be enhanced through non-verbal communication?
2. How can structured interventions develop non-verbal communication skills?
3. How effective are structured communication interventions?

Significance of the Study

The significance of this study consists in the possible contribution to the improvement of the comprehension of how C/PA interventions, including nonverbal communication techniques, can improve the lives of children with ID. The results will compare and evaluate various communication interventions, and will demonstrate the importance of educators empowering clients in the development of non-verbal communication skills. To date, there has been a limited amount research done on this topic, and this study will help to expand this knowledge base for children with intellectual disabilities and provide specific details on the most appropriate methods for enhancing communication with these children for educators and caregivers. In addition, the result of the study can help design the more effective educational programs and interventions for enhancing children's communication with ID. It is suggested that the finding of this study will be useful in molding policies and supportive framework that can enrich educational approach involving non-verbal communication to children with ID.

Limitations and Delimitations

1. In the same manner, there are limitations in the study. First, the study involved a small population of students with ID who are currently schooling in public special education schools in Faisalabad, Pakistan.
2. The delimitations of the study include the following: This study is bound by geographical location Faisalabad, Pakistan as well as by age children with intellectual disability and school setting public special education schools.

RESEARCH METHODOLOGY

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

Research Design

In the present research, the quasi-experimental method is employed that combine pretest and posttest measures to assess the impact of a communication intervention on teaching nonverbal communication skills to learners with Intellectual Disabilities (ID). The design entails an experimental group, a group that has received certain forms of communication interventions, and the other group that was given traditional instructions, which makes it easier to compare changes in communication skills in the two groups brought about by the interventions.

Target Population

The target population is 12-year-old learners with ID who attend public educational institutions with focuses on special education. These participants have mild to profound forms of ID, thus covering a broad spectrum to the effectiveness of the above communication intervention.

Sample and Sampling Technique

The sample consisted of four participants. Two of them were selected from each of the experimental group while two were selected in the control group. This enables a control that is necessary when comparing the impact of the communication intervention.

Experimental Group

The experimental group is offered special training concerning nonverbal communication including; eye contact, facial expressions, gesture, and posture. These interventions are behavioral as the participants imitate the probed behaviors during their rehearsal.

Control Group

The control group class is the one that is taught the normal curriculum without implementing the communication interventions, and the results will be used to establish whether the change brought by the intervention is great or not.

Selection Criteria

- Suffer from mild to moderate learning disorder or sub normality.
- In receipt of formal education, being enrolled in a formal education setting.
- Informed assent was secured from parents for participants.

Sampling Technique

To select the participants, simple random sampling was used from the identified eligible students. This urge, the researcher was able to avoid selection bias and gave each participant the same probability of being selected.

Development of Communication Interventions

The skills which are intended to be developed are the certain aspects of nonverbal communication, such as eyes contact, face expressions, gestures, and body language. The goal, therefore, is to increase participants' interpersonal communication competence.

Content: What's important is that the sessions major on nonverbal communication aspects:

Eye Contact: Assisting participants in making the right eye contact during interaction.

Gestures: Coaching in the application of the signs of the hand and other signs when speaking.

Facial Expressions: A simulation of training participants to act certain ways; in this case, by only using their facial expressions.

Body Language: Employing orientation as well as postures in order to depict engagement in listening.

Duration and Frequency:

ISSN E: 2709-8273
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JOURNAL OF APPLIED LINGUISTICS AND TESOL

The intervention takes place over six to eight weeks, with three sessions during the week at 15 to 20 minutes per session. It also has the effect of ensuring that the sessions are interesting and do not become fraught for the participants.

Design Elements:

- Clear and concise advice and commands.
- That is why teachers use flashes, charts, and other types of games that help maintain the children's attention.
- Roleplay activities which recreate typical social situations.

Delivery of Communication Interventions:

Medium: The following learning aids are employed where children perform right and wrong gestures on flashcards and picture charts.

Setting: The intervention occurs in a structured, natural setting which is preferably within an educational setting.

Frequency: Specific details in therapy; 80 minutes per session, thrice a week for 4weeks.

Control Group Activities:

In the control group, little to no communication intervention is incorporated into the typical instructing techniques known as direct instructions and paper-pencil activities.

Research Tools

Pre-test and Post-test Assessments:

Formal observation tools are employed for self-directed assessment of nonverbal communication and then used to compare pre and post intervention measures.

These tests include:

Eye Contact: Eyes movements' coordination and especially the capacity to fixate arm, head, and the trunk in front of the object.

Gestures: Correctness of hand gestures and signs.

Facial Expressions: Employment of hands, arms, or the whole body to exhibit an emotion.

Body Language: Body orientation to show that the listener is engaged in attending to a speaker.

Observation Checklist:

Participant behavior during the intervention is assessed using a structured checklist. It includes: attention span, engagement in activities, and interpretation of gesture/ Body language.

Teacher and Parent Feedback:

Pre and post intervention qualitative data on participant progress are obtained from the teachers and parents through semi structured interviews.

Validity of Research Tool

Pre-test:

Before the two groups are treated, they are first tested on facilities of nonverbal communication.

Intervention Phase:

The communication interventions are implemented for 6-8 weeks to the experimental group, whereas, the control group continues its normal learning.

Data Collection

For the Data Collection, the Instruments used as pre and post-tests, observation checklists, and interviews with educators and parents- interview from the Special Education Public Schools as our research universe. Both groups then complete the posttest to determine the extent, if any of their nonverbal communication skills have increased. During the intervention, students' behavior is recorded on the checklist. Self-rating is also done for the teachers and parents in order to support the quantitative results.

ISSN E: 2709-8273
ISSN P:2709-8265
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Data Analysis

The first section of the chapter describes the dataset applied in the analysis and the second section provides an overview of the tools and methodologies used in the analysis. Descriptive methods, diagrams, and tabular presentation tools are used to identify existing trends, relationships, and patterns. The collected data was analyzed using frequency and percentage through SPSS software. Paired sample t-test was applied to assess the effect of intervention on the respondents of the study.

Table 1

Age of the Respondents

Age	Frequency	Percent
9	1	16.7
10	2	33.3
11	1	16.7
12	2	33.3
Total	6	100.0

The age distribution of the sample can be discussed as following: 33.3% of participants are 10 years old, and 33.3% are 12 years old. The other participants can as well be divided equally between 9 years (16.7%) and 11years (16.7%). These proportions enable detailed exploration of the communication behaviors of individuals belonging to diverse age groups. This research would be helpful in the future, it would be useful to analyze how age affects non-verbal communication skills: eye contact and body language.

Table 2

Gender of the Respondents

Gender	Frequency	Percent
Male	5	83.3
Female	1	16.7
Total	6	100.0

The gender distribution is also skewed according to gender with 83.3 % of the participant being male and only 16.7 % female. It therefore could be due to the nature and imbalance of gender representation in the observed face to face total communication observed in the sample. Perhaps it is timely to examine how males and females differ in exhibiting eye contact, facial and hand gestures and other body movement.

Table 3

Grade of the Respondents

Grade	Frequency	Percent
Moderate	6	100.0

All participants are in the “Moderate” grade level designating them in one category in relation to academic performance. Given all participants were equated for academic level, it becomes important to determine if academic performance impacts on the volume of eye contact and frequency of hand gestures.

Table 4

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreEC1	2.17	6	.983	.401
	PostEC1	2.50	6	.548	.224
Pair 2	PreEC2	1.33	6	.816	.333
	PostEC2	1.83	6	.983	.401
Pair 3	PreEC3	1.83	6	.983	.401

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

	PostEC3	1.50	6	.548	.224
Pair 4	PreEC4	2.00	6	.894	.365
	PostEC4	2.50	6	1.049	.428
Pair 5	PreEC5	2.50	6	1.378	.563
	PostEC5	2.83	6	.408	.167
Pair 6	PreG1	1.50	6	.837	.342
	PostG1	1.83	6	.753	.307
Pair 7	PreG2	2.00	6	.894	.365
	PostG2	1.83	6	.983	.401
Pair 8	PreG3	2.33	6	.816	.333
	PostG3	2.33	6	.816	.333
Pair 9	PreG4	2.17	6	.753	.307
	PostG4	2.67	6	.516	.211
Pair 10	PreG5	1.00	6	.000	.000
	PostG5	3.00	6	.632	.258
Pair 11	PreFE1	4.50	6	1.225	.500
	PostFE1	2.17	6	.983	.401
Pair 12	PreFE2	2.67	6	.516	.211
	PostFE2	2.17	6	.753	.307
Pair 13	PreFE3	2.50	6	1.225	.500
	PostFE3	2.17	6	.753	.307
Pair 14	PreFE4	1.67	6	.816	.333
	PostFE4	2.00	6	.894	.365
Pair 15	PreFE5	1.67	6	.816	.333
	PostFE5	1.83	6	.983	.401
Pair 16	PreBL1	1.67	6	.816	.333
	PostBL1	2.50	6	.837	.342
Pair 17	PreBL2	1.67	6	1.033	.422
	PostBL2	2.67	6	.516	.211
Pair 18	PreBL3	2.17	6	.983	.401
	PostBL3	2.17	6	.753	.307
Pair 19	PreBL4	1.83	6	.983	.401
	PostBL4	1.83	6	.753	.307
Pair 20	PreBL5	1.83	6	.983	.401
	PostBL5	2.33	6	.516	.211

The Paired Samples Statistics table shows analysis of students' pre and post estimates and the changes in means scores after implementation of intervention. The mean values indicate improvements in some areas, such as Pair 4 (PreEC4: 2.For example, in Pair 10, the learners ' scores have improved; whereby the learners were at PreG5 score of 1.00 and improved to PostEC4 score of 2.50. ØIn Pair 11, the learners have gone down whereby they have improved from PreFE 4.50 to PostFE 2.17. The variation, as presented via standard deviations is relatively low, though some pairs, for instance PreG5, could not even exhibit pre- test variation. All are less than 0.2 indicating reliable mean estimates particularly the PostBL2 pairs. The analysis shows that some of the variables have major fluctuations, including Pair 3, Pair 5, and Pair 7 and others have no variation at all such as Pair 8 (PreG3, PostG3). The implication of this data is that it was not feasible to obtain all positive results, though additional paired t-tests have to be conducted to validate the changes' significance.

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Table 5
Paired Samples Correlations

Pairs	Pre & Post	N	Correlation	Sig.
Pair 1	PreEC1 & PostEC1	6	.186	.725
Pair 2	PreEC2 & PostEC2	6	.581	.226
Pair 3	PreEC3 & PostEC3	6	-.928	.007
Pair 4	PreEC4 & PostEC4	6	.426	.399
Pair 5	PreEC5 & PostEC5	6	.178	.736
Pair 6	PreG1 & PostG1	6	.159	.764
Pair 7	PreG2 & PostG2	6	-.227	.665
Pair 8	PreG3 & PostG3	6	-.200	.704
Pair 9	PreG4 & PostG4	6	-.857	.029
Pair 10	PreG5 & PostG5	6	.	.
Pair 11	PreFE1 & PostFE1	6	.083	.876
Pair 12	PreFE2 & PostFE2	6	-.343	.506
Pair 13	PreFE3 & PostFE3	6	-.542	.266
Pair 14	PreFE4 & PostFE4	6	.548	.261
Pair 15	PreFE5 & PostFE5	6	-.332	.520
Pair 16	PreBL1 & PostBL1	6	.000	1.000
Pair 17	PreBL2 & PostBL2	6	-.250	.633
Pair 18	PreBL3 & PostBL3	6	.495	.318
Pair 19	PreBL4 & PostBL4	6	.495	.318
Pair 20	PreBL5 & PostBL5	6	-.263	.615

To describe the research participants' performance before and after taking the test, the Paired Samples Correlations table was used, and the number of the participants which constituted this sample was 6. A majority of these combinations does not display strong relationships or even a negative relationship at all, given the fact that p-values of above 0.05 denote weak relationships. It is worth to notice that Pair 3 (PreEC3 & PostEC3) revealed the negative correlation coefficient r = -0.928, which is a significant negative correlation at $p < 0.05$ level. Likewise, Pair 9 (PreG4 & PostG4) also have negative correlation coefficient (r = -0.857, p = 0.029) which show a considerable Negative Correlation. While at the same time other pairs for instance, involving PreBL1 & PostBL1 has no correlation at all with 'r = 0.000' and 'p = 1.000'. In general, the results presented below indicate that only several pairs differ by more than two points, and most fairly similar or in some cases have no difference at all between pre- and post-test results.

Table 6
Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	PreEC1 - PostEC1	-.333	1.033	.422	-1.417	.751	-.791	5	.465
Pair 2	PreEC2 - PostEC2	-.500	.837	.342	-1.378	.378	-1.464	5	.203

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

Pair 3	PreEC3 - PostEC3	.333	1.506	.615	-1.247	1.913	.542	5	.611
Pair 4	PreEC4 - PostEC4	-.500	1.049	.428	-1.601	.601	-1.168	5	.296
Pair 5	PreEC5 - PostEC5	-.333	1.366	.558	-1.767	1.100	-.598	5	.576
Pair 6	PreG1 - PostG1	-.333	1.033	.422	-1.417	.751	-.791	5	.465
Pair 7	PreG2 - PostG2	.167	1.472	.601	-1.378	1.711	.277	5	.793
Pair 8	PreG3 - PostG3	.000	1.265	.516	-1.327	1.327	.000	5	1.000
Pair 9	PreG4 - PostG4	-.500	1.225	.500	-1.785	.785	-1.000	5	.363
Pair 10	PreG5 - PostG5	-2.000	.632	.258	-2.664	-1.336	-7.746	5	.001
Pair 11	PreFE1 - PostFE1	2.333	1.506	.615	.753	3.913	3.796	5	.013
Pair 12	PreFE2 - PostFE2	.500	1.049	.428	-.601	1.601	1.168	5	.296
Pair 13	PreFE3 - PostFE3	.333	1.751	.715	-1.504	2.171	.466	5	.661
Pair 14	PreFE4 - PostFE4	-.333	.816	.333	-1.190	.524	-1.000	5	.363
Pair 15	PreFE5 - PostFE5	-.167	1.472	.601	-1.711	1.378	-.277	5	.793
Pair 16	PreBL1 - PostBL1	-.833	1.169	.477	-2.060	.394	-1.746	5	.141
Pair 17	PreBL2 - PostBL2	-1.000	1.265	.516	-2.327	.327	-1.936	5	.111
Pair 18	PreBL3 - PostBL3	.000	.894	.365	-.939	.939	.000	5	1.000
Pair 19	PreBL4 - PostBL4	.000	.894	.365	-.939	.939	.000	5	1.000
Pair 20	PreBL5 - PostBL5	-.500	1.225	.500	-1.785	.785	-1.000	5	.363

This table shows the means of pre- and post-test scores for the different variables and the paired sample correlations between the two. A majority of the pairs have low coefficients of determination and the mark of the paired samples are not significant at p<0.05 level because they have p>0.05 hence implying insignificant correlation between the pre- and post-test scores. The only significant and strong negative correlation coefficients found are Pair 3 (PreEC3 and PostEC3) value (= -0.928, while the p-value is 0.007) and Pair 9 (PreG4 and PostG4) with (-0. 857) than the p-value of 0.029. Other pairs are no correlated, including for instance Pair 16 (PreBL1 and PostBL1) has Pearson's r = 0.000 and p = 1 .000. In conclusion, it can be found from the study that only a few pairs are valid enough whereas most do not have that much difference between the pre and posttest.

DISCUSSION

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This research examines the efficacy of the structured communication interventions in order to promote nonverbal communication abilities in children with Intellectual Disabilities (ID). Gestures, facial expressions, eye contact, signs, and other bodily signs; they are some of the chief means of communication that persons with ID so much rely on when speaking is a challenge for them. Skill in the employment of non-verbal signs not only divides into the primary functions of communicating but also is fundamental in enhancing the pragmatic aspects of interpersonal communication, affective self-assertion and social inclusion. Therefore, such augmentative and alternative communication (AAC), strategies like Picture Exchange Communication Systems (PECS), and other related treatments that seek to enhance the development of effective communication nonverbal skills. With reference to motor milestones, children with ID have poor eye contact, impaired gesture, and apraxia of face and body that lead to frustration, social exclusion and behavioral disorder. The mentioned difficulties are best solved by approaches tailored to help such kids learn how to communicate and interact within society.

For the purpose of measuring the effects of the communication interventions on the levels of non-verbal communication, a quasi-experiment pre- test and post-test research design was used. The participants of the study were 6, all male and aged 9-12 years and classified as having moderate learning disabilities, and were assigned to the experimental and control groups based on standard random sample technique. The experimental group went through communicational behavioral modification which aimed at eye contact, facial expressions, gesture, and body language even though the control group was exposed to regular class teaching with no further treatment. Additional data was obtained by using observation checklist; pre and post-test on specific learning domain; and open-ended feedback from teachers and parents. Descriptive statistics and descriptive data, paired sample t-test, and internal thematic response analyses were employed in quantitative and qualitative study of outcomes yielded through the intervention.

The study showed that the structured communication interventions led to a slight change in participants' nonverbal communication ability. Concerning eye contact, learners were extremely weak when it came to frequent or sustained eye contact, therefore, did not make any visible progress when it came to using eye contact as a tool to show engagement or interest. Own pre-test data gave an impression that many learners 'never' or 'rarely' kept eye contact, while at the same time, pointing at the general neutrality or negativity of post-test responses , it revealed limited change . Thus, the utilization of hand gestures was sporadic and inconclusive at the same time. As ascertained pre-intervention, learners established few correct gesture usage and failed to demonstrate much development in this area by the end of post-test, while their behavior retained a lack or correct context or effective gestures. This suggested that further and more specific action was required.

Findings of the Study

1. **Eye Contact**
    - 50% of learners "Sometimes" maintain eye contact.
    - 83.3% "Never" sustain eye contact for a long time.
    - 50% reported eye contact is "Never" effective in conveying attention.
    - No improvement in frequency or duration of eye contact after intervention.
2. **Hand Gestures**
    - 66.7% of learners "Never" use hand gestures frequently.
    - 50% indicated gestures are "Sometimes" effective.
    - 100% reported gestures do not align with verbal communication.
    - Post-test results show no significant improvement in gesture usage or appropriateness.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

3. **Facial Expressions**
    - 83.3% noted learners' faces are "Always" expressive in showing emotions.
    - 66.7% reported a lack of variety in facial expressions.
    - 50% said learners "Never" engage others with their facial expressions.
    - Post-test results show reduced expressiveness and no significant improvement.
4. **Body Language**
    - 50% of learners "Never" use body movements frequently.
    - 66.7% reported posture is "Never" relaxed.
    - 50% noted body language "Sometimes" shows engagement.
    - Post-test results indicate no progress in body movement, posture, or physical space usage.

CONCLUSIONS

This paper lays emphasis on the subject of communication interventions and how useful they are in fulfilling the nonverbal social skills of children with Intellectual Disabilities (ID). Self-directed learning for the creation of learning games: the results provided a picture showing that although children with ID are able to use eye contact, hand gestures, facial expressions, and body language expressively, these are potentials that are realized with a lot of difficulty during communication. The pre-test produced evidence of a general absence of clear and consistent non-verbal communication skills; the learner was unable to sustain eye contact, used improper hand gestures and could not present body language effectively. These deficits complicate their manifestation of feelings, object interest and overall social interaction. There was an extension of positive progress noted in the second observation section, covering facial expressions and body posture, however main productivity themed low consistency and appropriateness scores were still identified in the majority of participants. Those may include, short duration of intervention, small number of participants used or population heterogeneity in their needs. However, the spoke with many unique insights that highlight the nurses' need for structured communication interventions, especially those in children with ID. Thus we see that gestures, facial expressions, eye contact and other aspects of nonverbal communication prove to be critical in improving social exchange, affective communication and activities of daily living of these children. Hence, the role of educators, specialist of speech and language, and caregivers is to identify and establish goal-directed interventions that put to practice frequently and encourage, including problem solving. Further research should engage the children for a longer time, have a larger, and a more diverse sample, and ask the caregivers and parents about their views on the communication interactions. Furthermore, the use of other technology enhanced interventions like AAC devices may even enhance gestural development in children with ID. Therefore, as the findings suggest that there is a need for further support and development of the approaches this study provides valuable evidence that supports the need to promote children with ID to grasp and engage in efficient nonverbal communication methods. Through the development of these skills, we are able to enable provision of social interaction, emotional regulation, and overall quality life for persons with Intellectual Disabilities.

Recommendations

1. It is recommended that future programs should be more comprehensive to provide the children with ID adequate time to learn non-verbal cues as well as time to practice.
2. Promote the development of non-verbal communication at the learning center by employing such things as picture boards and speech devices.
3. Establish accurate conditions of peer interaction by organizing small groups and increasing the child's trust to others.

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JOURNAL OF APPLIED LINGUISTICS AND TESOL

4. Give training for teachers to enable them impart the right strategies for dealing with nonverbal communication.

References

Abramenkova, I. (2002). The role of communication in cognitive development. *Psychology Review, 45*(2), 56-70.

American Association on Intellectual and Developmental Disabilities. (2024). Intellectual disability.

Al-Yagon, M. (2016). Communication and social skills in children with intellectual disabilities: Interventions and strategies. *Journal of Developmental Disabilities, 37*(3), 45-56.

Beirne-Smith, M., Patton, J. R., & Kim, M. (2002). The role of motivation in the development of children with intellectual disabilities. *Journal of Intellectual Disability Research, 46*(3), 197-206. https://doi.org/10.1046/j.1365-2788.2002.00448.x

Beirne-Smith, M., Patton, J. R., & Kim, M. (2006). *Mental retardation: An introduction to intellectual disabilities* (8th ed.). Pearson Education.

Bradley, E., & Hollins, S. (2013). The development of communication skills in children with intellectual disabilities. *Child Development Journal, 24*(4), 12-23.

Browder, D. M., et al. (2006). Teaching academic skills to students with severe intellectual disabilities. *American Journal on Mental Retardation, 111*(4), 331-340. https://doi.org/10.1352/0895-8017(2006)111[331:TASTSW]2.0.CO;2

Drew, C. J., & Hardman, M. L. (2007). *Exceptional children: An introduction to special education* (9th ed.). Pearson.

Drew, C. J., & Hardman, M. L. (2007). *Exceptionality in children and youth*. Pearson.

Erez, O., & Peled, O. (2001). Information processing and the cognitive development of children with intellectual disabilities. *Journal of Developmental Disabilities, 8*(1), 75-86.

Fenning, P., & Rose, P. (2014). The role of communication in the development of social skills in children with intellectual disabilities. *Child and Adolescent Social Work Journal, 31*(1), 67-78.

Fenning, P., et al. (2014). Communication interventions for children with intellectual disabilities. *Journal of Developmental Disabilities, 39*(3), 198-211. https://doi.org/10.1177/0162643413495246

Fletcher, R. E., Huffman, M. A., & Bray, M. A. (2003). Teaching learning strategies to children with intellectual disabilities. *Education and Training in Developmental Disabilities, 38*(1), 33-44.

Hallahan, D. P., & Kauffman, J. M. (2006). *Exceptional learners: An introduction to special education* (9th ed.). Pearson.

Haring, T. G., McCormick, M. P., & Haring, A. E. (1994). *Students with severe disabilities: A global perspective*. Prentice Hall.

Hughes, C., MacDonald, W., & Williams, R. (2002). *Teaching strategies for students with intellectual disabilities*. Harper Collins.

Hunt, P., & Marshall, K. (2002). Learning and attention: Their relationship to the development of academic skills in children with intellectual disabilities. *Journal of Developmental and Physical Disabilities, 14*(3), 307-322. https://doi.org/10.1023/A:1022572517164

Kaiser, A. P. (2000). *Language intervention in the early years: A developmental approach*. Paul H. Brookes Publishing.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

Kittler, A., Wolery, M., & Westling, D. L. (2004). Effects of instructional strategies on the learning of children with intellectual disabilities. *Journal of Special Education Technology, 19*(2), 17-31. https://doi.org/10.1177/016264340401900202

Lancioni, G. E., O'Reilly, M. F., & Cuvo, A. J. (2007). Augmentative and alternative communication for individuals with intellectual disabilities: Practices and perspectives. *Journal of Special Education, 41*(1), 12-26.

Macmillan, D., Siperstein, G., & Gresham, F. (1996). Academic performance in children with intellectual disabilities. *Journal of Special Education, 30*(2), 105-116. https://doi.org/10.1177/002246699603000201

Mirenda, P. (2003). Augmentative and alternative communication for children with developmental disabilities: A guide for parents and professionals. *The Journal of Special Education, 37*(3), 110-116.

Quenemoen, R. F., Thompson, S. J., & Thurlow, M. L. (2003). Academic progress of children with intellectual disabilities: Challenges and strategies. *Journal of Intellectual Disability Research, 47*(4), 308-320. https://doi.org/10.1111/j.1365-2788.2003.00521.x

Saunders, M. (2001). The attention of children with intellectual disabilities. *Journal of Special Education, 34*(3), 175-185. https://doi.org/10.1177/002246690103400302

Shere, D., & Shukla, P. (2016). Intellectual disability: Concept and classification. *Indian Journal of Psychiatry, 58*(3), 328-331. https://doi.org/10.4103/0019-5545.189484

Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development*. National Academies Press.

Sternberg, R. J. (2003). *The psychology of human intelligence*. Cambridge University Press.

Taylor, D., Toms, M., & Hughes, C. (2005). The impact of motivation on learning in children with intellectual disabilities. *Journal of Educational Psychology, 97*(2), 348-358. https://doi.org/10.1037/0022-0663.97.2.348

Turnbull, A. P., Turnbull, H. R., & Wehmeyer, M. L. (2004). *Exceptional lives: Special education in today's schools* (6th ed.). Pearson.

Vakil, S., Shelef-Reshef, D., & Levy-Shiff, R. (1997). Cognitive and academic functioning in children with intellectual disabilities. *Journal of Intellectual Disability Research, 41*(3), 213-224. https://doi.org/10.1111/j.1365-2788.1997.tb00411.x

Varley, J. (2014). Enhancing communication in children with multiple disabilities. *Journal of Intellectual Disability Research, 58*(1), 45-58.

Vygotsky, L. S. (1983). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wehman, P. (1997). *Life beyond the classroom: Transition strategies for young people with disabilities* (2nd ed.). Paul H. Brookes Publishing.

Westling, D. L., & Fox, L. (2004). *Teaching students with severe disabilities.* Pearson.

Werts, M. G., Foster, S., & Gansle, K. A. (1996). Cognitive characteristics of children with intellectual disabilities. *Mental Retardation, 34*(5), 301-308. https://doi.org/10.1352/0047-6765(1996)34[301:CCOFCW]2.0.CO;2

Yoder, P. J., Retish, P. J., & Wade, K. (1996). Pragmatics of communication in children with intellectual disabilities. *Journal of Speech and Hearing Research, 39*(4), 811-823. https://doi.org/10.1044/jshr.3904.811

Zaidman-Zait, A., Young, R. L., & Hartley, M. (2020). Communication interventions for children with intellectual disabilities: Evidence-based approaches. *Journal of Autism and Developmental Disorders, 50*(4), 1043-1060.

Zashchirinskaia, A. (2020). The role of non-verbal communication in children with intellectual disabilities. *Journal of Special Education Research, 28*(2), 125-136